{In Archive} RE: Recap of Blue River modeling & decision support meeting, Friday January 27 ▶

Bob McKane to: Smith, Nikola M -FS

02/01/2012 04:45 PM

Allen Brookes, "Reger, Allison -FS", "Friesen, Cheryl -FS", "Glick, Cynthia -FS", Co: Connie Burdick, David Olszyk, "Shank, Doug -FS", "Hobson, Jeremy -FS", "John.Bolte@oregonstate.edu", "Bennett, Karen A -FS", Nathan Schumaker, Archive: This message is being viewed in an archive.

Nikola,

Thanks, talking next Mon or Tue after 1:30 would work for me - just let me know. In regard to your question about Envision and the Willamette project, I've attached a recent paper by Bolte et al. in Solutions journal. The Envision website (http://envision.bioe.orst.edu/) is another good source of info and includes some case study examples. I've cc'd the rest of the group here just in case they are interested.

Bob

Robert McKane, Ph.D.
Research Ecologist
USEPA Western Ecology Division
Corvallis, Oregon 97333
541-754-4631

[attachment "Bolte et al 2011_Solutions_Willamette Eco Services.pdf" deleted by David Olszyk/COR/USEPA/US]

"Smith, Nikola M -FS" Bob, Many thanks to you and Cheryl for invit... 02/01/2012 02:56:56 PM

From: "Smith, Nikola M -FS" <nmsmith@fs.fed.us>

To: Bob McKane/COR/USEPA/US@EPA, "Friesen, Cheryl -FS" <cfriesen@fs.fed.us>, "Spies, Tom

-FS" <tspies@fs.fed.us>, "Davis, Raymond J -FS" <rjdavis@fs.fed.us>, "Lanigan, Steve -FS"

<slanigan@fs.fed.us>, Nathan Schumaker/COR/USEPA/US@EPA, Connie

Burdick/COR/USEPA/US@EPA, "Reger, Allison -FS" <areger@fs.fed.us>, "Hobson, Jeremy -FS"

<jhobson@fs.fed.us>, "Bennett, Karen A -FS" <kabennett@fs.fed.us>, Allen Brookes/COR/USEPA/US@EPA, David Olszyk/COR/USEPA/US@EPA

Cc: "Glick, Cynthia -FS" <cglick@fs.fed.us>, "Shank, Doug -FS" <dshank@fs.fed.us>, Thomas

Fontaine/COR/USEPA/US@EPA, "John.Bolte@oregonstate.edu" < John.Bolte@oregonstate.edu>

Date: 02/01/2012 02:56 PM

Subject: RE: Recap of Blue River modeling & decision support meeting, Friday January 27

Bob,

Many thanks to you and Cheryl for inviting me and Karen to Friday's meeting. It was a very interesting discussion. It's exciting to hear that you've already been in contact with the Sweet Home Ranger District and are planning a visit in March. Prior to learning about VELMA I had been investigating the potential of Envision, and I'd definitely like to hear more about that linkage. Perhaps we can talk further about the possible roles that your, John's and Tom's work could play in the process. I'd also like to learn more about EPA's Willamette Ecosystem Services Project more generally. Perhaps we can start with a phone call? I'll be at a workshop tomorrow and Friday but am in next week.

Best, Nikola Nikola Smith
Associate Ecologist & Ecosystem Services Specialist
U.S. Forest Service Pacific Northwest Region
Natural Resources / State & Private Forestry
Portland, OR
503-808-2270
nmsmith@fs.fed.us

----Original Message----

From: Bob McKane [mailto:Mckane.Bob@epamail.epa.gov]

Sent: Wednesday, February 01, 2012 12:59 PM

To: Friesen, Cheryl -FS; Spies, Tom -FS; Davis, Raymond J -FS; Lanigan, Steve -FS; Nathan Schumaker; Connie Burdick; Reger, Allison -FS; Hobson, Jeremy -FS; Bennett, Karen A -FS; Smith, Nikola M -FS; Allen Brookes; David Olszyk Cc: Glick, Cynthia -FS; Shank, Doug -FS; Thomas Fontaine; John.Bolte@oregonstate.edu

Subject: Recap of Blue River modeling & decision support meeting, Friday January 27

Hi all,

Thank you for taking time to participate in the Blue River modeling & decision support meeting at EPA last Friday. It was a very helpful discussion, and I look forward to working with you all to move this project forward. I've jotted down some notes, below, recapping the main points and next steps that we discussed. Please feel free to add to or correct any of this!

To begin, I presented an overview of the VELMA ecohydrology model (slides and a recent publication are attached). Nathan Schumaker's and Allen Brooke's wildlife (HexSim) and fish (SMURF) population models were discussed very briefly. We are working toward linking all three models for the Blue River application -- will discuss details of that linkage another time.

Three alternative forest management scenarios (listed below) were proposed for modeling the Blue River Watershed (BRW). Goal is to have scenarios 1 and 2 ready to go by March, if possible. I think Allison said she will base these scenarios on John Cissel's Ecological Applications scenarios, correct? Scenario 3 will take more time. To make this easier, all 3 scenarios will be constructed such that harvest, fire and any other events will take place at 5 or 10 year intervals.

However, the VELMA modeling crew will redistribute those events on an annual basis for more realism. How we do this will require further discussion with you:

- 1) NW Forest Plan, as formulated (per Cissel Eco Apps paper)
- 2) Blue River Landscape Plan, as formulated (per Cissel Eco Apps paper)
 - 3) Current Blue River Plan (post litigation?)

Simulations of these alternative scenarios will focus on quantifying tradeoffs among multiple ecosystem services, as suggested in slide #13 of the attached VELMA presentation (presented at Friday's meeting). Key endpoints in this tradeoff analysis will include timber, carbon sequestration, water quantity and quality, greenhouse gases, and fish and wildlife populations.

Additional details to be included in the simulations, if possible:

1) spotted owls, red voles, squirrels -- Nathan, Ray and I (and anyone else who may be interested) will have a follow-up discussion soon to explore data needs, etc.

- 2) apply empirical stand structure vs. biomass relationships to translate Velma biomass into more meaningful habitat quality information for the wildlife modeling effort -- Tom's excellent suggestion
- 3) stream temperature responses -- adding this to VELMA is high on our "to do" list, given the importance of this variable to fish populations
 - 3) road effects on hydrology -- adding this is likely a year away
- 4) incorporate soil survey info -- Karen indicated HJA map will be ready later this year; upper BR much later

Also discussed:

- Karen and Nikola described ecosystem services work in the Sweet Home RD involving a variety of stakeholders: ETC (private timber company), Oregon Wild, Santiam Watershed Council, among others (please fill in...). I mentioned that I will be talking with the Sweet Home Ranger and staff in March, so I'd like to follow up on this discussion prior to that meeting.
- Tom mentioned another ecosystem services project he is working on in eastern Oregon, and has sent the following links containing lots of great info: http://fpf.forestry.oregonstate.edu/home http://carbon-tradeoffs.forestry.oregonstate.edu/
- Please see Cheryl's message below containing a link to a white paper describing the role of models in landscape management -- very relevant to our discussion.
- I briefly mentioned the connection of the process-based modeling work (Velma/HexSim/Smurf) with John Bolte's Envision Andrews project. We are moving toward linkage of the process models with John's Envision decision support framework, with the intent of providing a more effective and interactive decision support environment for land managers and other stakeholders. More on this another time...

Next step:

- I'd like to propose that this group meet again (March?), once the initial Blue River scenarios have been assembled. The goal would be to discuss development of our approach for implementing the scenarios and summarizing the results. This will be an iterative process, with land managers and modelers working collaboratively to end up with an informative and useful product.

Thanks again, and send me a note with any additional comments or corrections.

Bob

Robert McKane, Ph.D. Research Ecologist USEPA Western Ecology Division Corvallis, Oregon 97333 541-754-4631

(See attached file: VELMA_Blue River USFS meeting_1-27-12.pdf) (See attached file: Abdelnour etal 2011 WRR_Hydro responses to forest harvest (2010WR010165).pdf)

From: "Friesen, Cheryl -FS" <cfriesen@fs.fed.us>

To: Bob McKane/COR/USEPA/US@EPA

Cc: "Reger, Allison -FS" <areger@fs.fed.us>, "Hobson, Jeremy

-FS" <jhobson@fs.fed.us>, "Bennett, Karen A -FS" <kabennett@fs.fed.us>, "Smith, Nikola M -FS"

<nmsmith@fs.fed.us>

Date: 01/31/2012 03:28 PM

Subject: paper I was talking about

Bob…can you send this to the other folks from our meeting last Friday? this is the paper I was talking about …. I'm ccing to Karen Bennett, Nikola, and Allison and Jeremy, who came from Eugene with me.

http://www.fs.fed.us/pnw/pubs/science-update-21.pdf

Cheryl Ann Friesen Science Liaison Willamette National Forest 57600 McKenzie Hwy. McKenzie Bridge, OR 97413

541-822-7226